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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,655	11/05/2001	Ernst Freydl	5054	5282

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EXAMINER

GORDON, BRIAN R

ART UNIT PAPER NUMBER

1743

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,655

Applicant(s)

FREYDL ET AL.

Examiner

Brian R. Gordon

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10-5-04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18, 22, 25, 26 and 28 is/are rejected.
- 7) ☒ Claim(s) 19-21, 23-24 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to **a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and **legal phraseology** often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract contains the terms "comprises" and "means".

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "7" and "4" have both been used to designate the same element as indicated in Figure 3. It appears as if both elements are pointing to a bottom portion of the vessel 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

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immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figure 1 is unclear for it appears as if the receptacle 3 is inside the vessel 2. The receptacle holds the vessel. Correction is required.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.

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- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Section headings are missing.

Election/Restrictions

- 4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-26 and 29, drawn to an evaporator arrangement, classified in class 422, subclass 100.
 - II. Claim 27, drawn to a method for evaporating a sample, classified in class 436, subclass 181.

The inventions are distinct, each from the other because of the following reasons:

- 5. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus may be used to practice another process such as cooling the contents of a receptacle with out any evaporation.
- 6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

9. During a telephone conversation with Charles Fallow on December 15, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-26 and 29. Affirmation of this election must be made by applicant in replying to this Office action. Claim 27 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

11. Claims 21, 24, and 29 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The dependency of claim 21 is improper.

Response to Arguments

12. Applicant's arguments filed August 25, 2004 have been fully considered but they are not persuasive. As to the 112 rejection of claim 1, applicant asserts the evaporator is not provided with a heating means. As such, the examiner has assumed applicant has elected to refer to the arrangement of a receptacle and cooling means as an evaporator. The term evaporator as stated in the preamble, does not add any structural limitations to the claim. It is well known that overtime and under the right conditions a liquid may evaporate from an open container. As such any open container may be classified as an evaporator.

Furthermore, applicant asserts a receptacle is understood to have a depth and walls. The examiner disagrees for the common definition of a receptacle is one that receives or is capable of receiving. As such a plate (glass slide or any other surface) with a flat surface (minus depth and walls) may also be referred to as a receptacle. As such "end regions", cross sections, and openings are not inherent features of a receptacle. These elements must be positively claimed in order for such elements to be considered.

As to claim 18 applicant states cooling part 4 forms the bottom wall of the receptacle 3. The cooling part is actually 7 and the cooling section is 4. It appears as inner part 9 forms the bottom wall of the receptacle. As such the cooling part does not confine the receptacle but yet partially defines a bottom portion of the receptacle.

The dependence of claim 21 was changed from 18 to 21. The claim is improper for depending upon itself.

The amendment to claim 22 makes the claim unclear for it reads as if the channels pass through a cooling fluid rather than the cooling fluid passes through the channels. As to the 102 rejection as based upon Lautenschlager applicant, compares the prior art reference to a Soxhlet apparatus (which has no bearing on the instant invention). The Soxhlet apparatus is not an issue of the instant application. Applicant states "No part of the sample vessel it self is cooled" and "the use of an evaporator is completely different from the use of a Soxhlet apparatus". This is an intended use argument. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987). Applicant further states instant invention is nonobvious over Lautenschlager and does not address the problems or objectives as stated by applicant. The prior art is not required to solve the problems nor achieve the same objectives as established by applicant. The prior art is only required to a structural equivalent of the pending invention.

As to the rejection as based upon Meyer applicant states the refrigerant is heated therefore the chamber cannot be regarded as a cooling section. While the examiner recognizes the refrigerant is heated, the refrigerant also cools in the chamber (see column 6, lines 39-42). As such the device does comprise a cooling section. Applicant further states the device does not allow the sample vessel such that a sample in the vessel is evaporated up to a residual volume and the sample vessel is not actively cooled. Such an argument is directed to the intended use or process of using the

device. Intended use and process limitations do not further limit the structure of the device. Applicant further states the instant invention is not related to a reaction chamber for an analyzer. As stated above the name by which applicant has chosen to refer to instant invention does not further limit the elements which the device is comprised up. The device of Meyer comprises the required elements of the claim. As such the device is considered a structural equivalent. Actually, Meyer refers to the device a temperature control device, which an evaporator may also be classified as such.

As to the rejection of McClurg applicant states "No means for evaporation are provided". The examiner made the same comment in the previous office action as directed to applicant's claim. The examiner stated the claims do not provide for any heating means for evaporation. Applicant responded in the instant remarks by stating on page 5 "For someone skilled in the art it is clear that an evaporator is not necessarily provided with heating means." A heating means not required. By applicant's own admission a heating means (means for evaporation) is not required. Furthermore, the claims do positively recite such a means. As such applicant's argument is moot. Applicant further states the instant invention is non-obvious over McClurg, because someone skilled in the art has no motivation to provide a holding device as disclosed by McClurg for cooling only a part of a sample vessel in an evaporator. This argument is invalid for the rejection as based upon McClurg (as well as the aforementioned prior art references) is an anticipation rejection and may not be overcome by obviousness arguments. Furthermore, the argument is directed to intended use of the device.

For reasons given herein above, the previous rejections are hereby maintained.

Claim Interpretation

13. As to claim 15, as previously stated a heating means/evaporation means is not required in the claim. The claim requires a holding device comprising at least one receptacle in a cooling section with cooling means. The amended phrase is directed to intended use and the process of using the device. As such any device containing the required elements would be considered as structurally equivalent.

Claim Rejections - 35 USC § 112

14. Claims 22 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 22 it is unclear what is meant by "channels for passing through a cooling fluid". The phrase implies the channels are submerged in a fluid. For the purpose of examination, the examiner has assumed cooling fluid passed through the channels.

Claim 25 refers to the outer diameter of the vessel. There is no antecedent basis with the claim or claim 15 for the outer diameter of the sample vessel and free inner diameter of the receptacle. The claim is written as if it has been established or defined that the vessel and receptacle are of circular shape. The shape of the vessel and receptacle has not been previously established. Therefore, one cannot assume an outer

diameter and free inner diameter are inherent features of the vessel and receptacle, respectively. A square vessel/receptacle do not have diameters.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 15-17, 22, 26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Lautenschlager US 5,858,178.

Lautenschlager discloses a process for preparing and/or extracting samples by heating them together with a solvent in a container under pressure. The samples are dried by heating in a container; and the resultant vapors are drawn off to generate a vacuum in the container.

As seen in Figure 3 the device comprises pressure vessels 106 are all of similar design and consist of a pot-shaped housing 109 with a housing floor 111 and a hollow cylindrical, vertically extending housing wall 112. The aperture of the housing, which can be closed off by a cover 113 (holder which the vessel is inserted), is limited by the upper inside rim of the housing wall 112 (FIG. 4).

In greater detail, in the pressure vessel 106 a solvent chamber 127 and over it a sample chamber 128 are arranged, with a vapor duct extending upwards between the solvent chamber 127 and a vapor space 129 above the sample chamber 128, with a cooling device 110 so arranged in the vapor space 129 that any condensate 132 of the

reagent or solvent produced in the area of the cooling device 110 will run down into the sample chamber 128 and preferably drop on to the sample 133 therein, and with the sample chamber 128 associated with an overflow 134 leading to the solvent chamber 127.

For preference, the cooling device 110 possesses a cooling body 151 arranged at the center of the underside of the cover 113, particularly in the form of a cooling rod or finger.

17. Claims 15-18, 26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyers et al. US 4,933,146.

Meyers et al. disclose a temperature control apparatus for controlling the temperature of a plurality of cuvettes consisting of an annular sealed chamber containing a refrigerant, means fixed to the sealed chamber for receiving the sample cuvettes, a heater in thermal contact with the sealed chamber, and a temperature sensor in thermal contact with the sealed chamber. The sealed chamber may include a plurality of thermally conductive posts fixed to the chamber, the spacing between adjacent ones of the posts being adapted to receive the sample cuvettes.

The upper portion 18 (of the holder) includes a generally horizontal annular member 54 which is adapted to be fixed to the hub assembly 14 as described above.

The annular member 54 is integrally formed with an annular top portion 56, an inside vertical member or wall 58, and an outside vertical member or wall 60. The annular top portion 56 includes a plurality of square openings 62 formed therethrough adapted to receive the cuvettes 32.

The void 26 is provided at the lower end region of the opening 62 and may be filled with refrigerant (cooling means).

In response to the heat flow, localized cooling of the chamber 20 (cooling section) in the immediate area of the cuvette 32 causes vaporized refrigerant within the chamber 20 to rapidly condense, liberating additional heat that flows through the annular chamber 20 and posts 28 to the cuvette 32. (column 6, lines 39-43)

A temperature setting digital-to-analog converter (DAC) 104 receives a digital word via lines 106 and converts the digital word to an analog voltage that is applied to the subtractor 100.

18. Claims 15-17, 22, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by McClurg US 3,940,249.

McClurg discloses a laboratory testing procedure wherein test tubes are uniquely supported under conditions of refrigeration, the test tubes being placed in a generally vertical position with only the test tube bottom portions in contact with the top surfaces of a closed refrigerant reservoir having heat-absorbing means confined therein.

As seen the figures the vessels or tubes are inserted in the fill openings 18 and at a lower section of the device a cooling section is provided by providing a cooling fluid that flows in a lower portion of the holder.

Allowable Subject Matter

19. Claims 19-21 and 23-25, 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter: see previous office action.

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


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